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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/810,687

03/29/2004

Boris Ginzburg

P-6582-US

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EXAMINER

GELIN, JEAN ALLAND

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

05/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/810,687	Applicant(s) GINZBURG ET AL.	
	Examiner JEAN A. GELIN	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-12,14-22,24-32,34 and 35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-12,14-22,24-32,34 and 35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/25/08 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 12, 22, 29, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Costa et al. (US 2005/0044464).

Regarding claims 1, 12, 22, 29, and 32, Costa teaches estimating a parameter related to a data packet being protected using a protection mechanism, said protection to protect said data packet based on a predetermined criterion related to a successful transmission of said data packet that uses one or more parameters (i.e., data packet is

provided with a first protection means a second protection means to reduce error and protection means are chosen as a function of characteristic of the radio interface wherein more or less redundancy is added to data packet, [0008]-[0013]).

4. Claims 1, 12, 22, 24, 29, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Guo et al. (US 6,937,591).

Regarding claims 1, 12, 22, 29, and 32, Guo teaches estimating a parameter related to a data packet being protected using a protection mechanism, said protection to protect said data packet based on a predetermined criterion related to a successful transmission of said data packet that uses one or more parameters (i.e., a adaptive method to adjust contention window according to a required QoS using the CSMA/CA protocol, col. 7, line 13 to col. 8, line 67).

Regarding claims 24, Guo further teaches wherein said first protection mechanism comprises a request-to-send/clear-to-send protection mechanism, and wherein said second protection mechanism comprises a clear-to-send-to-self protection mechanism (col. 8, lines 23-67 and col. 12, lines 35-40).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-11, 14-21, 25-28, 30, 31, and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guo (US 6,937,591) in view of Choi et al. (US 2003/0169763).

Regarding claims 5, 16, 25, 30, and 34, Guo teaches all the limitations above. Guo does not specifically teach the protection to modulate a data packet using a first modulation type and to protect said data packet using a first protection mechanism, to modulate said data packet using said first modulation type and to protect said data packet using a Second protection mechanism, or to modulate said data packet using a second modulation type, based on a predetermined criterion related to a successful transmission of said data packet.

However, the preceding limitation is known in the art of communications. Choi teaches transmitting a beacon signal having a contention free period followed by contention period and determining whether a transmission modulated data is possible before the CFP expires using different types of protection mechanism to protect data ([0012], [002], and [0028]). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the technique of Choi within the system Guo in order to use different types of modulated signal for transmission and different types of protection mechanisms to protect data.

Regarding claims 3, 14, Guo in view of Choi teaches all the limitations above. Choi further teaches said first modulation type comprises orthogonal frequency division multiplexing, and wherein said second modulation type comprises direct sequence spread spectrum/complementary code keying [0001]).

Regarding claims 4, 15, Guo in view of Choi teaches all the limitations above. Choi further teaches wherein said first protection mechanism comprises a request-to-send/clear-to-send protection mechanism, and wherein said second protection mechanism comprises a clear-to-send-to-self protection mechanism ([0012] and [0028]).

Regarding claims 6, 18, 27, and 31, Guo in view of Choi teaches all the limitations above. Choi further teaches at least one of said parameters is a time period for successful transmission of said data packet ([0011]-[0012]).

Regarding claims 7, 19, 28, Guo in view of Choi teaches all the limitations above. Guo further teaches said parameter is a power consumption for successful transmission of said data packet (col. 1).

Regarding claims 8, Guo in view of Choi teaches all the limitations above. Guo further teaches estimating at least one of said parameters based on one or more of a length of said data packet, a collision probability, a rate of a first modulation type, and a rate of a second modulation type (cols. 7-8).

Regarding claims 9, 26, and 35, Guo in view of Choi teaches all the limitations above. Guo further teaches based on said predetermined criterion comprises comparing between at least two of said first, second and third parameters (cols. 11-12).

7. Regarding claims 10, 11, 20, and 21, Guo in view of Choi teaches all the limitations above. Guo further teaches selecting to protect said data packet using said first protection mechanism if said third parameter is greater than said second parameter and said first parameter is smaller than said second parameter; and selecting to protect

said data packet using said second protection mechanism if said first and third parameters are greater than said second parameter (i.e. adapting CW calculation per flow determination, cols. 7-8).

Response to Arguments

8. Applicant's arguments with respect to claims 1, 3-12, 14-22, 24-32, and 34-35 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN A. GELIN whose telephone number is (571)272-7842. The examiner can normally be reached on 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JGelin
/Jean A Gelin/
Primary Examiner, Art Unit 2617